

ABSTRACT

Apparatus for optical inspection includes a source of optical radiation, which is adapted to scan a spot of the radiation over a sample, whereby the radiation is scattered from the spot. A detection system includes at least first and second detectors optically coupled to receive the scattered radiation and to generate respective first and second outputs responsive thereto, the detection system being configured so that the first detector detects variations in the scattered radiation with a greater sensitivity than the second detector, while the second detector saturates at a higher intensity of the scattered radiation than does the first detector. A signal processor is coupled to receive the first and second outputs and to determine, responsive to the outputs, locations of defects on the sample.